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New Pendolino ETR 610

A personal review by Boyd Misstear of the new Lima Expert HO Scale SBB Unit

The Lima model running on Boyd's Weston BLS Alpine Model Railway.

Photos: Boyd Misstear

Sometimes while watching trains one senses it would be nice to have a model of that particular type or actual unit. And then out of the blue along comes just such a model! Well this is what happened to me when I first encountered SBB's Pendolino ETR610 Class. As many readers of *Swiss Express* will know, these high-speed tilting trains are built by Alstom Ferroviaria and have a 7-car formation, four cars with motor bogies distributing the driving capability and three trailer cars. The wheel arrangement is – (1A)'(A1)' + (1A)'(A1)' + 2'2' + 2'2' + 2'2' + (1A)'(A1)' + (1A)'(A1)'. Train lengths are 187.4m and when loaded with 430 passengers they weigh approximately 421t and have a designed top speed of 250kph. Units can tilt up to 8 degrees, have a power output of 5,500kW (7,400 hp) and are equipped to operate under three electrical systems: the Italian 3kV DC; Swiss/German/Austrian 15kV (16 2/3 Hz), and French 25kV (50 Hz). The SBB units are currently equipped with signalling systems in use in both Germany and Switzerland (See *Swiss Express* 122 – ETCS and Swiss Signalling).



Here in the USA the SBB ETR 610 model is marketed by Hornby International under their Lima Expert label, the HL1660 Set comprising four coaches – two driving trailers (one powered) and two intermediate vehicles with pantographs. Power is collected from the wheels. Hornby's plan being to release an add-on set later to complete the whole train. I operate a layout loosely modelled on a contemporary BLS mountain route and my track and power supply is based on Marklin "3-rail" (actually their C-Gleis with two running rails and small "hidden" centre studs for third rail pick up). Therefore I was pleasantly surprised to learn that Hornby had made provision, not only for 2-rail DC and DCC operation, but also for adding a centre slider pickup and straightforward strappings to change to 3-rail. I considered that I would be able to carry out the necessary changes as the instructions led one to believe it is a simple undertaking. However I was pre-empted from undertaking this work when my local model store offered to fit the chip and slider for a nominal fee, indicating if they made the changes it would not negate the warranty. I chose, wisely as it transpired, to accept this kind offer!

Upon receipt of the set, my first impressions were not disappointing. The coaches appeared to be to scale length, and a great deal of trouble had gone into replicating the details and accuracy of the markings and colour scheme. In short, the moulded plastic vehicle bodies really looked the part! Having purchased a new model I consider that there are a number of points to immediately inspect, and ideally prior to placing on the rails. This helps make for a good initial running experience. The six key items in my view are: the wheels rotate freely; they have correct (or at least sufficient!) flange depth; correct back-to-back spacing to negotiate points, particularly the blades, without shorting and derailing

ETR610 with its "Mouth" open on the Gotthard South Ramp on 23 Jun 2015.

at frogs; close couplers work freely (have no “burrs” obstructing movement – a common fault!); are at the correct height level, and the diaphragms between cars (if present) are correctly designed not to cause derailments while negotiating stated minimum radii.


When it comes to wheels, despite MOROP's (the European association that federates national associations of model railroad enthusiasts), derived 'Normal European Modelling Standards', more commonly referred to as NEM, there is no one-size-fits-all when it comes to model manufacturer's interpretations! For example differing back-to-back and flange wheel depths apply, as do axle lengths and end 'pin' designs. Adding to this, to attract and sell to users of both 2-rail and 3-rail (the latter more commonly found in mainland Europe), most model manufacturers offer interchangeable wheel sets (usually exchanged at no cost when one buys directly from a store rather than an internet retailer). However, some manufacturers have in recent years offered models with what I would refer to as 'compromised' wheels, choosing parameters that should work for both DC and AC environments. This is the approach Hornby have taken before and have now taken with the ETR 610. So my euphoria with the ETR610 model coaches was, sadly to be short lived, as I further inspected the vehicles. Before I could get to coupling and trying the set, I noticed two areas of concern – one that would affect all customers whether 2-rail or 3-rail, and another 3-rail only. The first, and a common area of concern, rested with the coupler arrangement. As one can imagine, with a somewhat complex piece of equipment, the manufacturer had chosen to have a single multi-pin connector glued to a 'simple' plastic close coupling. The coupling and male/female plug/socket arrangement naturally made sure the vehicles were assembled in the correct orientation. But the movement was somewhat restricted by all the wiring, and at best the assembly could be described as a bunch of wires glued together into their respective plug/socket and to the coupling connector! Also the workmanship and finish of each coupler obviously reflected the skills of the particular assembly worker in China. I hasten to add, there are many examples of fine HO railway models being produced in China, Modern Gala manufacturing for LS Models is in my opinion an excellent benchmark. But sadly, this level and attention to quality is not present in this instance.

The second concern affects only 3-rail users and involves the addition of the slider. Unfortunately the model I received had initially the incorrect slider fitted, causing the bogie it was located beneath to have the wheels lifted off the rails by the strength of its spring. Upon investigation it was clearly the wrong slider, but even with the shorter slider, Hornby intended to be used fitted, there was still a concern. There was still insufficient vertical and horizontal movement clearance to avoid fouling on both Marklin 12.1 and 24.3 degree points and cross overs. It was at this stage, and having researched and learned of a model recall in the autumn of 2014 within Switzerland, I felt it prudent not to pursue any personal modifications to make this otherwise excellent looking set work correctly. And so, with a heavy modelling heart, I returned the set, which was quickly changed back to



Another ETR610 on the Gotthard on 24 June 2015..

2-rail DC/DCC operation and my hope is it is giving its new recipient a great deal of pleasure. But it is clear, once a train has been assembled, one will not want to disassemble unless absolutely necessary in order to avoid damage to the coupling and wire connectors. This will make servicing extremely problematic over time!

When in Switzerland this summer, I took the opportunity to informally discuss this particular model with a knowledgeable individual and found my findings were similar to others. And so I never did get as far as powering up, inspecting the features, and seeing this set running. Hornby International are to be congratulated on making available this model, but it is unfortunate that this offering has been made (compromised?), to meet both price and its speed onto the market place. Also it is not a set that is likely to be easily maintained even if spare parts are available. I'm sure the manufacturer will be aware of these shortcomings and we can but hope will learn and correct for their next offering? Perhaps other manufacturers will take up the challenge and produce an ETR610 model that meets present day modelling expectations of quality, reliability and maintainability, even if it is moderately more expensive? Subsequently a little bird has whispered in my ear that another organisation, with a good quality reputation, is considering releasing their version of this Pendolino in the next few years. I for one will be very interested if this materializes and hope to read of its availability and improved quality in a future edition of our annual *Swiss Express* Nurnberg Toy Fair Report. 

So where was Heidi?

While you're watching the MGB trains at Brig, these eyes are watching you.

